

PART F

Transport and Parking Management

Part F: Transport and Parking Management

Contents

1 Introduction 3
1.1 Aim 3
1.2 Objectives 3
2 Strategies/studies 3
2.1 Willoughby Integrated Transport Strategy 2036 3
2.2 Review of Parking Rates, Cardno, February 2021 4
3 Parking provisions 4
3.1 Car parking 4
3.2 Motorcycle parking 5
3.3 Bicycle parking and end-of-trip facilities 5
3.4 The layout, design, and security of bicycle parking facilities 6
4 Car parking and driveway design 6
4.1 Car parking 6
4.2 Vehicle crossing/driveways 7
4.3 Access handle 8
4.4 Mechanical car parking systems and turntables 8
4.5 Electric vehicles 9
5 Major development 9
5.1 Parking and traffic studies 9
5.2 Off-street loading/unloading facilities 10
5.3 Visitor car parking 10
5.4 Accessible car parking for people with disability 10
5.5 Stack car parking 11
5.6 Electric vehicle charging 11
5.7 Car share spaces 12
5.8 Autonomous vehicles 13
5.9 Further controls for medium and high-density residential accommodation 13
5.10 Additional controls for a centre-based child care facility 14
6 Alternative and sustainable transport strategies 15
7 Laneway widening 15
Attachment 1: Chatswood CBD 24
Attachment 2: St Leonards precinct 25
Attachment 3: Artarmon railway precinct 26

Attachment 4: Building Code of Australia building classifications 27

Attachment 5: Laneway widenings 28

1 Introduction

Willoughby City Council is committed to minimising the adverse effects of car use in a way that sustains and enhances the economic and environmental qualities of the local government area.

Increasing the supply of car parking can encourage a greater number of vehicle trips. This increases congestion and impacts negatively on the city environment. We carefully consider when off-street car parking is allocated for developments and the amount of car parking allocated.

This part of Willoughby Development Control Plan (Willoughby DCP) outlines the transport requirements for off-street car parking, bicycle parking and end-of-trip facilities, loading/unloading facilities, and provisions for alternative transport modes.

1.1 Aim

The aim of this part is to reduce and manage the demand for car use and associated parking. This part also encourages the use of public transport and other alternative modes of transport.

1.2 Objectives

The objectives of this part are to:

a. ensure developments make adequate provision for a reasonable number of off-street car parking spaces, including accessible (disabled) parking spaces

b. ensure developments make adequate provision for parking and end-of-trip facilities for bicycles

c. ensure developments make adequate provision for electric and autonomous vehicles, car share spaces, and other alternative modes of transport

d. provide controls for the safe, convenient, and efficient movement of pedestrians, bicycles and vehicles for developments

e. ensure the access and design of car parking areas contribute positively to the public domain

f. reduce the demand for private car use and off-street car parking by employing the principle of travel demand management.

2 Strategies/studies

2.1 Willoughby Integrated Transport Strategy 2036

Willoughby Integrated Transport Strategy 2036 is Willoughby City Council's overarching framework for transport planning and initiatives to 2036. This part of Willoughby DCP aligns with the principles and intent of this important strategy for the local government area. The strategy is at willoughby.nsw.gov.au.

2.2 Review of Parking Rates, Cardno, February 2021

This report from consultants Cardno reviewed local parking rates, including bicycle parking and end-of-trip facilities.

It states that parking polices must reflect the need for parking across different types and uses. It also recognises that an oversupply of parking is just as undesirable as an undersupply.

The report recommends that, in some cases, no car parking should be required for retail and business premises in Chatswood CBD and the St Leonards precinct. It also recommends reducing the number of car parking spaces in the Artarmon railway precinct. It also suggests that some reductions in parking spaces could apply to developments near a major public transport route. The intention of reduced rates being to minimise additional traffic generation and therefore congestion in already constrained urban environments and to take advantage of the excellent active and public transport accessibility of these areas.

The report recommends that parking rates may be reduced by employing the principles of travel demand management (TDM). This would generally need to be supported by a travel demand management plan (see Section 6 of this part).

3 Parking provisions

3.1 Car parking

The demand for car parking will vary from one development to another and in different locations.

A reduction in the car parking rates applies to developments in Chatswood CBD and the St Leonards precinct and within a 500m radius of Artarmon railway station. The parking requirements within these areas are maximum rates.

The parking rates outside of these areas, including major public transport route areas, are ‘target’ rates. These rates are neither maximum nor minimum. However, any proposal to vary the number of spaces must be justified and consider the location and parking demand generated by the development.

A reduction of the target rate for developments along and within 200m of a major public transport route may be considered if the development is close to a regular bus service.

Major public transport routes are:

- Pacific Highway south of Albert Avenue
- Victoria Avenue west of Penshurst Street
- Willoughby Road
- Strathallen Avenue
- Penshurst Street south of Victoria Avenue
- Sailors Bay Road (for land zoned B2 Local Centre)
- Eastern Valley Way
- Smith Street
- High Street
- Mowbray Road

Notes:

- If part of a property falls within the 500m radius of the Artarmon railway precinct or within 200m of a major public transport route, the whole of that property is considered to be within the railway precinct or major public transport route.
- A parking survey may be required to support a proposal to increase or decrease the target rates.
- See sections 5.3 and 5.4 of this part for details on visitor and accessible car parking.
- Unless otherwise stated, if the total number of car spaces is not a whole number, the number of spaces required must be rounded down.
- Any additional car spaces that may be allowed by Willoughby City Council will be included in the calculation of the gross floor area.
- If the development is an extension/modification to an existing development, more car parking space is only required if increasing the floor area creates further parking demand.

Table 1 at the end of this part details car parking requirements.

Maps showing Chatswood CBD, the St Leonards precinct and the Artarmon railway precinct are in attachments 1, 2 and 3.

3.2 Motorcycle parking

Adequate provision must be made for motorcycle parking for all new developments and, where practicable, for alterations, additions and change of uses. All motorcycle parking requirements are minimum rates.

As a minimum, one space for residents and one visitor space is required for residential development comprising 10 or more dwellings, and one space for employees and one visitor space is required for commercial, retail, industrial and other non-residential buildings exceeding 500m^2.

Notes:

- If the total number of spaces is not a whole number, the number of spaces required must be rounded down.
- Motorcycle spaces must have a minimum dimension of 1.2m x 3m.

Table 2 at the end of this part details the requirements for motorcycle spaces**.**

3.3 Bicycle parking and end-of-trip facilities

The social, economic, and environmental benefits of bicycle use have created a greater emphasis on promoting and prioritising bicycle parking facilities.

The Cardno report recommends a minimum bicycle parking rate that is greater than existing demand to support ongoing and future shifts towards more sustainable transport mode targets.

Research has found that an increase in quality end-of-trip facilities is correlated with increased bicycle use. The provision of showers, personal lockers and change rooms also has the benefit of accommodating other people who walk or exercise regularly.

All new developments and wherever practicable, bicycle parking and end-of-trip facilities should be provided for alterations and additions and change of uses.

The bicycle parking and end-of-trip facilities are minimum requirements. As a minimum, all developments should provide 2 bicycle parking spaces to ensure at least a small amount of parking is provided at all destinations.

Table 3 at the end of this part details the requirements for bicycle parking. Table 4 details end-of-trip facilities.

3.4 The layout, design, and security of bicycle parking facilities

The layout, design and security of bicycle parking facilities must comply with the minimum requirements under Australian Standard 2890.3 (2015). The Standard classifies bicycle parking facilities by the level of security provided. These are:

a. Class A: a space within an individual bicycle locker that provides a high security locking system

b. Class B: a space within a secure room or structure that is accessed with devices such as keys, codes or swipe cards for communal areas (chain mesh fencing is not suitable for Class B facilities)

c. Class C: a space that allows a bicycle frame and wheels to be locked to a 'bicycle parking device' using the cyclists own 'locking device'

Notes:

- Class A and B bicycle parking facilities are intended for use by residents/employees of the development and must be in a secured area that is not accessible to the general public.
- Class C bicycle parking facilities are intended for use by visitors to the building and must be located in visible publicly accessible locations.
- AS2890.3 (2015) defines a 'bicycle parking device' as 'a construction made of high security material designed to provide stability to bicycles placed in or against the device'.
- Bicycle racks and rails are examples of a bicycle parking device.
- End-of-trip facilities include personal lockers for clothes, showers and change rooms.
- Where the total number of bicycle spaces and end-of-trip facilities is not a whole number, the number of spaces and facilities required must be rounded up.

4 Car parking and driveway design

4.1 Car parking

These controls apply to all car parking and access arrangements:

a. the layout of car parking spaces must comply with AS/NZS 2890.1 and AS/NZS 2890.6

b. column locations must comply with AS/NZS 2890.1 (columns shall not be located within circulation aisles)

c. the headroom for an accessible (disabled) car space must comply with the requirements of AS 2890.6

d. car parking space accessed from a rear lane must provide a minimum setback of 1m with a 1m splay to the rear boundary

e. except for assigned residential parking spaces, the length of any blind aisle shall not exceed the width of six 90° parking spaces plus 1m

f. one way aisles/access handles may only be used for areas where there is no general public access, there are less than 6 parking spaces and where appropriate measures are provided to allow vehicles to pass within the site

g. ventilation must be provided under the relevant standards for basement car parking areas

h. for developments with vehicular access from a main road frontage (Pacific Highway, Eastern Valley Way, Strathallan Avenue, Willoughby Road, Penshurst Street and Boundary Street) vehicles must be able to turn around within the site to ensure they can enter and leave the site in a forward direction

4.2 Vehicle crossing/driveways

A new vehicle crossing is required if the proposal involves a change to the vehicle access arrangements or the number or location of car parking spaces and the existing vehicle crossing has any of these features:

a. is in a dilapidated condition with multiple cracks

b. is a trip hazard to pedestrians along the footpath alignment

c. there is evidence of significant damage from scraping on the road/laneway

d. is incomplete or has been constructed with non-approved materials

e. the crossing is unsafe due to its alignment with the proposed driveway or car parking space(s)

f. is in an unsafe location and there is a better alternative location for a new driveway

g. is proposed to be replaced as part of the development application

This requirement for a new crossing does not apply to proposed structures such as pergolas or open carports over an existing hard stand area.

Before construction, the applicant must obtain a separate vehicle crossing permit (construction of crossover on council property) from Willoughby City Council.

A new driveway crossing must comply with these controls:

h. the location, siting and grades of driveways, and driveway width must be in line with Australian Standard AS/NZS 2890.1

i. crossings must be separated from each other at the kerb and must be a minimum of 600mm from the side boundary for residential properties and 1.2m for other developments

j. the distance between adjacent crossings must be less than 1.5m or greater than 6m to deter vehicles from attempting to park between driveways

k. driveways must not be located closer than:

- 2m from a street tree or 1.5m from any other tree or as otherwise directed by Willoughby City Council
- 1m from a power pole
- 1m from a council stormwater pit

l. if there is parking onsite for more than 6 vehicles, the driveway width must be sufficient to allow two vehicles to pass within the site

m. sight distance requirements at the property boundary must be provided in line with AS/NZS 2890.1

n. for single dwellings, only one crossing is permitted per property to improve streetscape, maximise on-street parking and reduce the number of conflict points between vehicles and pedestrians

o. dual occupancy developments may be permitted to have two vehicle crossings, providing the overall width of the two crossings does not exceed 30% of the property frontage

p. to maximise pedestrian safety, vehicles are to be at 90^0 to the boundary when leaving the site (where parking spaces are not in-line with the vehicle crossing, swept path diagrams are to show this requirement)

Note:

- Willoughby City Council does not generally support the removal of street trees to construct a new crossing. Approval to remove a tree will only be granted in exceptional circumstances.

4.3 Access handle

For any access handle for battle-axe allotments serving two or more dwellings, these requirements apply:

a. the minimum width of the access handle is 4.8m

b. reciprocal rights of way are to be provided over each separate access strip

c. a passing bay in line with AS/NZS 2890.1 is required for access handles greater than 30m

d. on an arterial or sub-arterial road, the access driveway for the first 6m from the property boundary is to be 5.5m wide

4.4 Mechanical car parking systems and turntables

Willoughby City Council does not generally support mechanical car parking systems or turntables, and under no circumstances will they be allowed for accessible or visitor car parking.

An applicant must show there is no other reasonable car parking arrangement available. They must ensure that safety, emergency and noise issues relating to the ongoing operation of a mechanical car parking system and/or turntable have been addressed to Willoughby City Council's satisfaction.

Mechanical systems and turntables must satisfy all of these requirements:

a. the site is constrained by existing conditions

b. they are only used to access spaces assigned to a particular dwelling/unit/tenant/business

c. there is adequate standing space within the site for vehicles waiting to use the system

4.5 Electric vehicles

More households are transitioning to owning electric vehicles. This means all new dwellings and significant alterations and additions to dwellings and dual occupancies must install a 3-phase electricity supply to make provision for a dedicated electric vehicle (EV) charger.

Adequate electricity supply must be made for EV charging to be available within individual car spaces and garages of all other new developments. This includes residential flat buildings, shop top housing and mixed use developments. See section 5.6 in this part for guidelines on EV charging.

5 Major development

In this part of Willoughby DCP, the definition of 'major' developments include:

a. new residential developments for attached dwellings, multi dwelling housing, residential flat buildings, seniors housing, boarding houses and hostels exceeding 300m^2 and 12 persons, shop top housing and mixed use developments

b. the erection of new buildings exceeding 1,000m^2, including commercial, industrial, institutional and other non-residential buildings

c. substantial redevelopment, refurbishment, or conversion of an existing building

Notes:

- Redevelopment is generally seen as 'substantial' if the proposal will result in more than a 10% increase in the 'gross floor area'.
- Depending on the size and scale, and any likely impacts, an authorised officer may determine that a proposal is regarded as 'major' development.
- An authorised officer is an employee who has delegated authority to make decisions on behalf of Willoughby City Council.
- Institutional and non-residential buildings include health service facilities, recreation facilities, centre-based child care facilities, community facilities, a place of public worship, and other miscellaneous developments.

5.1 Parking and traffic studies

All new major developments and developments that involve substantial alterations and additions must include a parking and traffic impact assessment report with the development application. This report may also be required for a change of use that is likely to have adverse traffic and/or on-street parking impacts.

The report must assess the parking and traffic impacts of the development on the surrounding arterial and local road network. It must also identify any external traffic-related infrastructure requirements for the proposed development.

Note:

- Any traffic or parking counts done for a parking and traffic impact assessment report should not be done during public or school holiday periods.

5.2 Off-street loading/unloading facilities

All new major commercial, retail and industrial developments, and developments that involve substantial redevelopment with a floor area in excess of 500m^2 for commercial/retail developments and 1,000m^2 for industrial developments, must make adequate provision for off-street loading and unloading facilities.

A loading/unloading bay/dock for these types of developments must comply with these controls:

a. loading bay dimensions must conform with AS 2890.2

b. onsite turning areas must be provided to ensure service and delivery vehicles can enter and leave the site in a forward direction (the swept path design templates shown in AS 2890.2 must be used to determine the layout of service areas)

c. the minimum headroom must be in line with AS 2890.2

d. adequate provision must be made for garbage compactor units

e. internal waste collection areas must have a headroom clearance of at least 6.6m

f. splays must be provided to the loading bay areas and at the driveway to ensure adequate sight distances for pedestrians

For other existing or smaller commercial, retail and industrial developments, including change of use, the size and number of loading bays/docks will depend on the type, size and scale of the proposed development. This includes the frequency of deliveries, size and bulk of goods, size of trucks, availability of on-street loading zones; and intended use of the commercial, retail or industrial premises.

As a minimum, provision should be made for a small rigid vehicle to access the site.

Note:

- The statement of environmental effects (SEE) or the parking and traffic impact assessment report must include details of the anticipated volume and frequency of deliveries, and the size of vehicles necessary to service the proposed development.

5.3 Visitor car parking

The visitor car parking rates in Chatswood CBD, St Leonards precinct and the Artarmon railway precinct are maximum rates. Visitor car parking spaces outside these areas, including major public transport routes, are target rates.

All visitor car parking spaces must be grouped together, sign posted and provided in a convenient and readily accessible location.

5.4 Accessible car parking for people with disability

All new developments and significant alterations and additions to major developments must, as a minimum, provide accessible car parking spaces for people with disability in line with Section D3.5 of the Building Code of Australia under the National Construction Code.

For Class 2 buildings that contain two or more sole occupancy units, the required number of accessible spaces is calculated on the number of adaptable units required for that

development. See Part B, Section 4.2.8 of Willoughby DCP to determine the number of adaptable units required for medium and high-density housing.

The National Construction Code identifies the class of building for different types of development. A guide to the building classifications is in Attachment 4.

Table 5 at the end of this part details the required number of accessible car parking spaces.

Accessible spaces must be clearly marked and provided in a communal car parking area. These spaces are not to be allocated to any individual unit or tenant.

There must be a continuous accessible path of travel from all accessible parking spaces to the entrance of the premises. In basement car parking areas, lifts must provide access to all levels.

Notes:

- If no parking is proposed, the minimum number of accessible spaces should be provided in line with Table 1.
- Accessible car parking spaces must comply with the design requirements of AS/NZS 2890.6.
- Where the total number of accessible spaces is not a whole number, the number of spaces required is to be rounded up.
- The required number of accessible car spaces for unspecified developments will be assessed on the individual merits of the proposal, with regard to the nature and scale of the proposed development.
- Where practicable, accessible car parking spaces should be provided for all developments, including a change of use.

5.5 Stack car parking

Stack or tandem car parking is where one or more vehicles need to be moved to allow another vehicle to enter or exit a car space. This type of car parking is only permitted if the affected vehicles are allocated to the same owner or tenant of residential, commercial, retail or industrial premises. It is also only permitted if there are no safety issues and not more than 25% of vehicles are in a stacked parking arrangement.

Notes:

- Stack or tandem car parking will generally only be considered for employee vehicles associated with low turnover commercial, retail and industrial uses having less than a total of 12 car parking spaces.
- Stack or tandem car parking is not permitted for accessible or visitor car parking.
- Adequate area to manoeuvre vehicles in a stacked parking arrangement must be available on site for all major residential, commercial, retail and industrial developments.

5.6 Electric vehicle charging

Demand for public electric vehicle (EV) charging stations is set to increase. Willoughby City Council is committed to extending this infrastructure as suitable locations are identified. It is also necessary to make provision for electric vehicle charging on private properties. This means all new major developments or significant alterations and additions to major

developments will be required to deliver the capacity for all parking spaces to have EV charging.

These controls consider two EV charging levels:

a. Level 1: a regular single-phase power point

b. Level 2: a single or 3-phase power point with a power range of 7kW, as defined by NSW Electric and Hybrid Vehicle Plan (Future Transport 2056) from Transport for NSW, which provides faster, more stable charging

The controls will require all types of residential and non-residential development to be designed and constructed with appropriate electrical infrastructure to allow for future EV charging points.

Electric circuitry to accommodate Level 2 electric vehicle charging points must be integrated into all off-street parking in new residential and non-residential development to ensure 100% of car spaces can install EV charging points in the future.

This must include:

c. adequate electrical capacity and infrastructure for the EV charging point system

d. either underground cables or cable trays sufficient to accommodate electric circuitry to each car space

Minimum electric circuitry for a Level 2 electric vehicle charging point is required to be:

e. for privately available spaces: Level 2 slow – single phase with 7kW power

f. for publicly available spaces: Level 2 fast – 3-phase with 11kW–22kW power

The installation of a Level 2 EV charging point is encouraged for all new dwelling houses and dual occupancies.

All new residential and non-residential development (other than dwelling houses or dual occupancies) must provide 1 parking space or 10% of all parking spaces – whichever is greater – to have a Level 2 EV charging point installed.

5.7 Car share spaces

There is a growing trend for individuals and businesses to use private car share vehicles as an economical alternative to car ownership. Car share schemes are generally more viable in locations where private car ownership is discouraged, such as Chatswood CBD, St Leonards precinct and the Artarmon railway precinct. Therefore, there may be opportunities to provide dedicated onsite parking spaces for car share spaces for large developments.

At this stage Willoughby City Council does not require a dedicated car share space to be provided for a new development. However, if a dedicated car share space is nominated on the site as part of a proposed development, we may allow a further reduction in the number of car parking spaces required for that development. The reduction in the actual number of car spaces will be assessed on the individual merits of the application.

Note:

- Details will need to be included in a travel demand management plan. This should include information such as strata levies for dedicated spaces for the exclusive use of building occupiers or easements to allow access to car share spaces by the general public.

5.8 Autonomous vehicles

The use of autonomous vehicles is a reality in the foreseeable future. Production and active testing is underway in major cities around the world to ensure the safe and efficient operation of these vehicles. This means appropriate infrastructure to support the use of autonomous vehicles needs to be in place for new developments.

Autonomous vehicles rely on the internet to operate. Internet access must be made available to all car parking areas, including basement car parking areas.

Note:

- As technology evolves, further requirements may be required to support the safe and efficient operation of autonomous vehicles.

5.9 Further controls for medium and high-density residential accommodation

These further controls apply to attached dwellings, multi dwelling housing, residential flat buildings, seniors housing, boarding houses and hostels exceeding 300m^2 and 12 persons, shop top housing, and mixed use developments comprising residential units:

a. visitor parking must be suitably grouped, clearly marked and conveniently located

b. visitor parking is to be designed to comply with Class 2 Medium Term parking in line with AS/NZS2890.1

c. any security for residents' vehicles must be installed to ensure that it does not impede access to visitor spaces

d. visitor car parking may be located forward of the building line providing it does not detrimentally impact the streetscape

e. all above ground car parking areas must be well landscaped and include the use of absorptive surfaces such as pavers or 'grasscrete' to soften the appearance of these areas

f. resident visitor car parking spaces must be available at all times for shop top housing and mixed use developments

g. the provision of car wash bays is not encouraged; if a car wash bay is proposed, the space must be connected to the sewer and serviced by recycled or tank stored water, and the development application must include the hydraulic details

h. provision must be made for removalist vans to park, load and unload onsite for all developments of more than 12 units or where no kerbside parking is available in front of the site on a classified road

i. pedestrian access to dwellings should be separate from vehicular access to the site

j. for residential accommodation of between 6 and 18 units, bulk waste storage bins must be provided on the site and adequate provision must be made for garbage vehicles to enter and leave the site in a forward direction

k. for residential accommodation of 4 or more storeys or 18 or more units with basement car parking, bulk waste storage bins must be provided in the basement with adequate height and provision for garbage vehicles to enter and leave the site in a forward direction

5.10 Additional controls for a centre-based child care facility

A centre-based child care facility includes a building or place that provides long day care, occasional child care, out of hours school care, preschool or an approved family day care venue.

These further additional controls apply to all types of child care centres:

a. access driveways widths are to be in line with AS/NZS 2890.1

b. car parking is to be provided on site for setting down and picking up children

c. vehicles must enter and leave the site in a forward direction

d. vehicle parking must be separated from any outdoor play areas to ensure safety and vehicle emissions do not affect children

e. pedestrian access must be separated from the access and manoeuvring of vehicles in the driveway and car parking areas

These controls apply to pre-school and long day care centres in residential areas outside Chatswood CBD:

f. a minimum 20m frontage is required or a corner block location in all residential areas to allow for a one-way drive through entry and exist

g. a drive-through drop-off and pick-up area is required at the rate of 1 car space per 10 children within the driveway

h. the width of the driveway must allow for a vehicle exiting the site to pass a parked vehicle

These controls apply to child care centres in Chatswood CBD

i. staff parking is to be clearly marked to reflect that they are for the exclusive use of staff associated with the operation of the child care centre between 7am and 7pm

j. a vehicle drop-off/pick-up area is to be provided at the rate of 1 space per 8 children

k. if the drop-off/pick-up area is in a basement car park area, it must be within 20 metres of a lift providing direct access to the child care centre

l. if the drop-off/pick-up area is not provided onsite, the matter will be referred to Willoughby City Council’s traffic committee to consider

m. the drop-off/pick-up area should be clearly marked to reflect that it is for the exclusive use of the childcare users during the centre’s morning and afternoon peak times, generally from 7am to 9.30am and 4pm to 6.30pm

Note:

- Depending on the size, scale, and location of the child care centre in a commercial area outside of Chatswood CBD, the number of car spaces and any other controls will be considered on the individual merits of the proposed development.

6 Alternative and sustainable transport strategies

Willoughby City Council encourages alternative and sustainable transport strategies to reduce the use and reliance on motor vehicles as the principal mode of transport.

Alternative transport strategies can be achieved by including a ‘travel demand management plan’ (also known as a ‘green travel plan’) in the business operation.

This plan has details on how to modify travel decisions to and from a business premises so that more desirable modes of transport are used and to reduce the adverse impacts of car travel. Examples include use of bicycles, carpooling, mini-bus pick-up/drop off, public transport services and provision of car share spaces.

Strategies in a travel demand management plan may include:

a. provide information to staff on public transport options available

b. provide staff with a discount or subsidy on public transport costs

c. provide a bus to pick up and drop off staff to the nearest railway station or bus interchange

d. provide staff with cycling allowances, loans and/or insurance

e. provide secure bicycle storage and shower and change room facilities

f. introduce a staff car sharing scheme for fleet vehicles

g. use private transport services or public transport for work related journeys

h. create a carpool scheme to and from work and provide priority parking for staff who carpool with 2 or more passengers

Subject to a written agreement and conditions of consent to implement a travel demand management plan, Willoughby City Council may reduce the required number of car parking spaces for a development.

7 Laneway widening

Increased urban development often requires the local road network to be upgraded to cope with additional traffic and improve access and traffic circulation. Willoughby City Council has identified a number of laneways that need to be widened to accommodate future commercial and residential developments. Affected properties must dedicate a portion of land when redevelopment occurs.

The affected properties are identified in Attachment 5**.**

Notes:

- Redevelopment of many properties has already resulted in the dedication of land for future lane widening purposes.

- Additional road works may be required to mitigate associated traffic impacts arising from a proposed development.
- The ‘gross floor area’ or ‘floor space ratio’ is calculated on the existing site area (before any dedication of land).

Table 1 Car parking rates

Land use category	Development type	Chatswood CBD and St Leonards precinct (maximum rates)	Artarmon railway precinct (maximum rates)	All other areas, including major public transport route (target rates)
Residential	a. dwelling houses, attached, and detached dual occupancies	1 space/dwelling	1 space/dwelling	1 space/dwelling with 2 bedrooms or less; 2 spaces/dwelling with 3 bedrooms or more
Residential	b. manor houses, attached dwellings and multi dwelling housing not exceeding 2 storeys or more than 4 dwellings in the R3 zone	0.5 space per studio and 1, 2, 3 or more bedroom units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 and 2 bedroom units; 1 space per 3+ units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 bedroom unit; 1 space per 2 and 3 or more bedroom units; 1 visitor space per 7 dwellings
Residential	c. affordable housing, including boarding houses and group homes	The minimum number of car parking spaces must comply with Affordable Rental Housing SEPP	The minimum number of car parking spaces must comply with Affordable Rental Housing SEPP	The minimum number of car parking spaces must comply with Affordable Rental Housing SEPP
Residential	d. seniors housing, including residential care facility, hostels and self-contained dwellings	The minimum number of car parking spaces must comply with Seniors Housing SEPP 2004	The minimum number of car parking spaces must comply with Seniors Housing SEPP 2004	The minimum number of car parking spaces must comply with Seniors Housing SEPP 2004
Residential	e. multi dwelling housing, residential flat buildings and attached dwellings with more than 2 storeys and 4 or more dwellings	0.5 space per studio and 1, 2, 3 or more bedroom units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 and 2 bedroom units; 1 space per 3+ units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 bedroom unit; 1 space per 2 and 3 or more bedroom units; 1 visitor space per 7 dwellings

Land use category	Development type	Chatswood CBD and St Leonards precinct (maximum rates)	Artarmon railway precinct (maximum rates)	All other areas, including major public transport route (target rates)
Residential	f. dwellings in shop top housing and mixed-use developments (further car parking for the commercial component is to be provided in line with the requirements for commercial and retail premises)	0.5 space per studio and 1, 2, 3 or more bedroom units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 and 2 bedroom units; 1 space per 3+ units; 1 visitor space per 7 dwellings	0.5 space per studio and 1 bedroom unit; 1 space per 2 and 3 or more bedroom units; 1 visitor space per 7 dwellings
Casual residential	g. hotels, motels and serviced apartments (if a restaurant or function room is included, the parking rates for that use is to be in line with the relevant parking rate)	0.25 space/room	0.75 space per room	0.75 space per room
Casual residential	h. bed and breakfast accommodation	The minimum number of car parking spaces must comply with Codes SEPP 2008	The minimum number of car parking spaces must comply with Codes SEPP 2008	The minimum number of car parking spaces must comply with Codes SEPP 2008
Office/business/retail	i. office and business premises	1 space/400m^2	1 space/75m^2	1 space/60m^2
Office/business/retail	j. retail premises (including supermarkets)	1 space/70m^2	1 space/50m^2	1 space/33m^2

Land use category	Development type	Chatswood CBD and St Leonards precinct (maximum rates)	Artarmon railway precinct (maximum rates)	All other areas, including major public transport route (target rates)
Office/business/retail	k. specialised retail premises (these controls apply to garden centre, plant nursery, hardware and building supplies, landscaping material supplies, timber yards and the like)	1 space/150m^2 of showroom and outdoor areas accessible to the public	1 space/125m^2 of showroom and outdoor areas accessible to the public	1 space/100m^2 of showroom and outdoor areas accessible to the public
Office/business/retail	l. wholesale supplies (in a business zone)	1 space/70m^2	1 space/50m^2	1 space/33m^2
Motor vehicle services	m. service stations	5 holding bays per service/workshop bay; plus office and retail space in line with office and retail rates	5 holding bays per service/workshop bay; plus office and retail space in line with office and retail rates	5 holding bays per service/workshop bay; plus office and retail space in line with office and retail rates
Motor vehicle services	n. vehicle repair stations	5 holding bays per service/workshop bay; plus office space in line with office rates	5 holding bays per service/workshop bay; plus office space in line with office rates	5 holding bays per service/workshop bay; plus office space in line with office rates
Motor vehicle services	o. vehicle sales and hire premises	1 space per 200m^2 of display area for customer parking; plus 5 holding bays per service/workshop bay; plus office space in line with office rates	1 space per 200m^2 of display area for customer parking; plus 5 holding bays per service/workshop bay; plus office space in line with office rates	1 space per 200m^2 of display area for customer parking; plus 5 holding bays per service/workshop bay; plus office space in line with office rates
Child care centres	p. long day centres	1 space/20m^2	1 space/20m^2	1 space/20m^2
Child care centres	q. pre-school child care centres	1 space/66m^2	1 space/66m^2	1 space/32.5m^2
Child care centres	r. occasional care and out-of-school care centres	1 space/26m^2	1 space/26m^2	1 space/20m^2

Land use category	Development type	Chatswood CBD and St Leonards precinct (maximum rates)	Artarmon railway precinct (maximum rates)	All other areas, including major public transport route (target rates)
Food and beverage	s. food and drinks premises (includes restaurant, café and take away food and drinks premises)	1 space/50m^2	1 space/50m^2	1 space/33m^2
Food and beverage	t. pubs	1 space/50m^2	1 space/50m^2	1 space/33m^2
Health and community services	u. hospitals	3 spaces per bed	3 spaces per bed	3 spaces per bed
Health and community services	v. medical centres (includes consulting rooms, medical centres and veterinary hospitals/clinics)	2 spaces per consulting room	2 spaces per consulting room	2 spaces per consulting room
Industrial	w. industrial activity, including high technology industries	1 space/100m^2 of factory floor area (including any storage areas); plus 1 space/60m^2 of office area and showroom area accessible to the public	1 space/100m^2 of factory floor area (including any storage areas); plus 1 space/60m^2 of office area and showroom area accessible to the public	1 space/100m^2 of factory floor area (including any storage areas); plus 1 space/60m^2 of office area and showroom area accessible to the public
Industrial	x. self-storage units	1 space/60m^2 office space plus 2 visitor spaces provided at the front if the premises in a publicly accessible area.	1 space/60m^2 office space plus 2 visitor spaces provided at the front if the premises in a publicly accessible area.	1 space/60m^2 office space plus 2 visitor spaces provided at the front if the premises in a publicly accessible area.
Industrial	y. warehouse, distribution centres, and wholesale supplies (in an industrial zone)	1/300m^2 of internal and external storage areas plus 1 space per 60m^2 of office space	1/300m^2 of internal and external storage areas plus 1 space per 60m^2 of office space	1/300m^2 of internal and external storage areas plus 1 space per 60m^2 of office space

Notes:

- If a specific land use is not included in this table, the car parking requirements will be assessed on the merits of the application. A parking and traffic impact assessment report may be needed with the application to determine the number of car spaces required.
- All requirements shown in m^2 are ‘gross floor areas’ in line with the definition under the dictionary in Willoughby LEP.

Table 2 Motorcycle parking rates

Zone type and usage	Chatswood CBD, St Leonards precinct and Artarmon railway precinct	All other areas, including major public transport routes
Business zones	1 space per 20 car parking spaces; 1 visitor space per 10 motorcycle spaces	1 space per 30 car parking spaces;1 visitor space per 15 motorcycle spaces
Industrial zones	1 space per 20 car parking spaces; 1 visitor space per 10 motorcycle spaces	1 space per 30 car parking spaces;1 visitor space per 15 motorcycle spaces
Residential zones and the residential components of shop top and mixed-use developments	1 space per 20 car parking spaces; 1 visitor space per 10 motorcycle spaces	1 space per 20 car parking spaces;1 visitor space per 10 motorcycle spaces

Notes:

- Motorcycle parking rates for land uses not included in this table will be assessed on the merits of the application
- As a minimum, one space for residents and one visitor space is required for residential development comprising 10 or more dwellings
- As a minimum, one space for employees and one visitor space is required for commercial, retail, industrial and other non-residential buildings exceeding 500m^2
- Visitor spaces are included in the total number of spaces required

Table 3 Requirements for bicycle parking and end-of-trip facilities

Zone type and usage	Chatswood CBD, St Leonards precinct and the Artarmon railway precinct	All other areas, including major public transport routes
Business	1 Class A or B bicycle space per 10 car parking spaces Minimum 1 Class C bicycle space or 1 space per 10 Class A or B bicycle spaces, whichever is the greater	1 Class A or B bicycle space per 20 car parking spaces Minimum 1 Class C bicycle space or 1 space per 20 Class A or B bicycle spaces, whichever is the greater
Industrial	Minimum 1 Class A or B bicycle space or 1 space per 10 car parking spaces, whichever is the greater Minimum 1 Class C bicycle space or 1 space per 10 Class A or B bicycle spaces, whichever is the greater	Minimum 1 Class A or B bicycle space or 1 space per 20 car parking spaces, whichever is the greater Minimum 1 Class C bicycle space or 1 space per 20 Class A or B bicycle spaces, whichever is the greater
Residential and residential components of shop top and mixed-use developments	1 Class A or B parking spaces per 10 units 1 Class C (rails/racks) per 10 apartments for visitors	1 Class A or B parking spaces per 20 units 1 Class C (rails/racks) per 20 apartments for visitors

Table 4: End-of-trip facilities for non-residential developments

Showers	Change rooms	Lockers
One shower per 5 bicycle parking spaces (Class A or B)	One change room per shower	Two personal lockers per bicycle space

Notes for tables 3 and 4:

- All bicycle parking and end-of-trip facilities for land uses not included in these tables will be assessed on the merits of the application.
- If no car parking or reduced car parking is provided in the Chatswood CBD, St Leonards precinct or the Artarmon railway precinct, bicycle parking and end-of-trip facilities must be provided and calculated on the maximum number of car parking spaces that would otherwise be required.
- Where more than one shower or change room is required for end-of-trip facilities, separate male and female facilities must be provided.

Table 5 Accessible car parking requirements

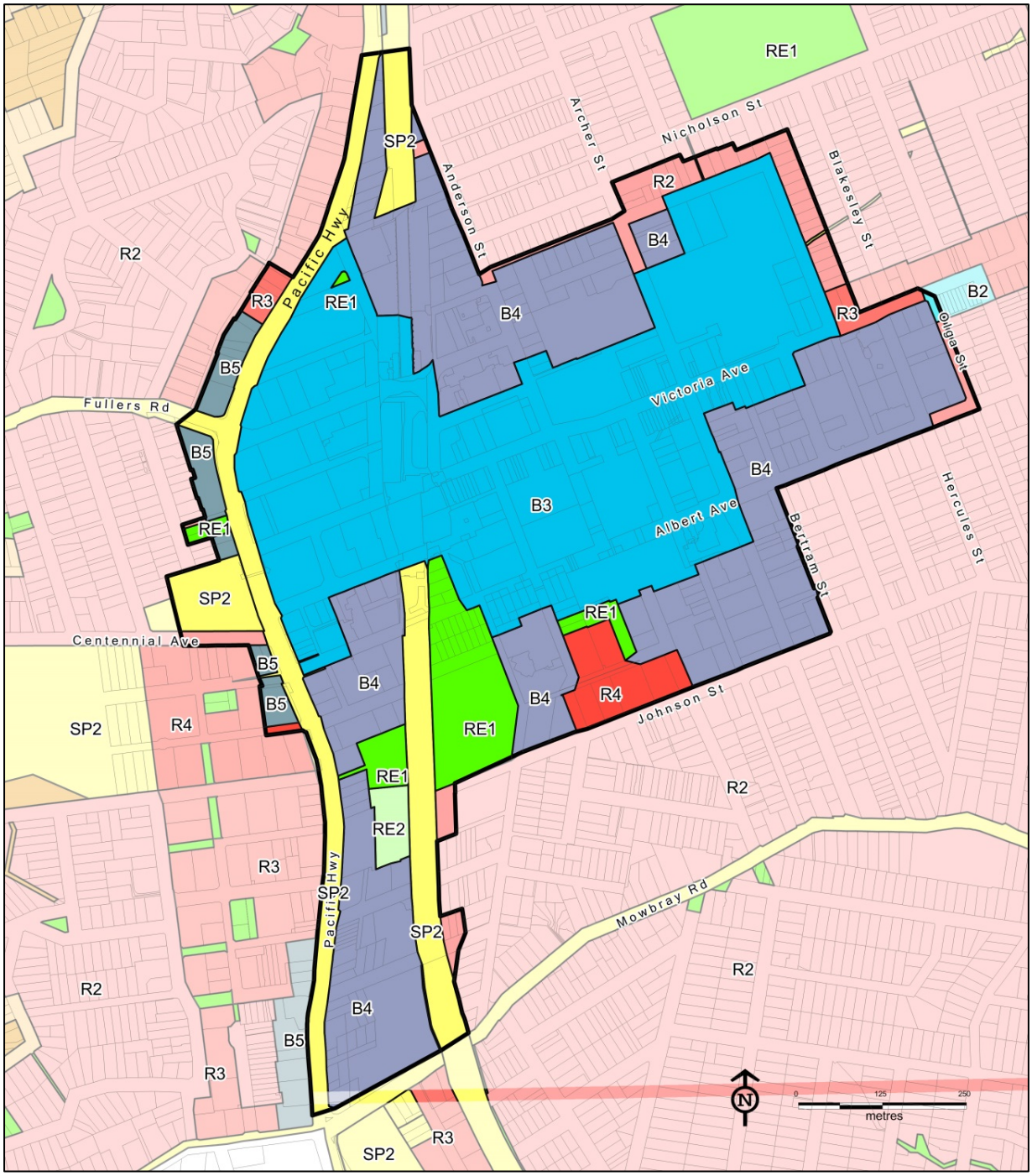
Class of building	Number of accessible spaces
Class 1a	Nil
Class 1b	1 space for each accessible or adaptable unit
Class 2	Whichever is the greater: a. Minimum 1 resident and 1 visitor space for developments comprising 10 or more units b. 1 space/4 accessible or adaptable units + 1 visitor space for developments comprising 50 or more car parking spaces
Class 3	Whichever is the greater: a. Minimum 1 resident and 1 visitor space for developments exceeding 300m^2 and 12 persons b. 1 space for each accessible or adaptable unit (10% of spaces must be provided as a visitor space) c. 3% of the total car parking spaces (10% of spaces must be provided as a visitor space)
Class 4	1 accessible space
Class 5, 6, and 8	In parking areas with 5 or more spaces, whichever is the greater: a. 1 employee and 1 visitor space b. 3% of the total car parking spaces (10% of spaces must be provided as a visitor space)
Class 7 and 9b	In parking areas with 5 or more spaces, whichever is the greater: a. 1 space b. 3% of the total car parking spaces
Class 9a	Whichever is the greater: a. 1 employee and 1 visitor space b. 4% of the total car parking spaces (10% of spaces must be provided as a visitor space)

Notes:

- Accessible parking is included in the total number of car parking spaces required. However, if no parking is required, the minimum number of employee/resident and visitor spaces must be provided.
- Additional accessible car parking spaces may be required in line with Section D3.5 of the Building Code of Australia under the National Construction Code.
- If the requirements under Section D3.5 change, the accessible car parking controls under this part of Willoughby DCP change accordingly.
- Applicants may apply a ‘performance solution’ under the Building Code of Australia to satisfy the provision of accessible car parking in lieu of the ‘deemed-to-satisfy solution’ requirements.

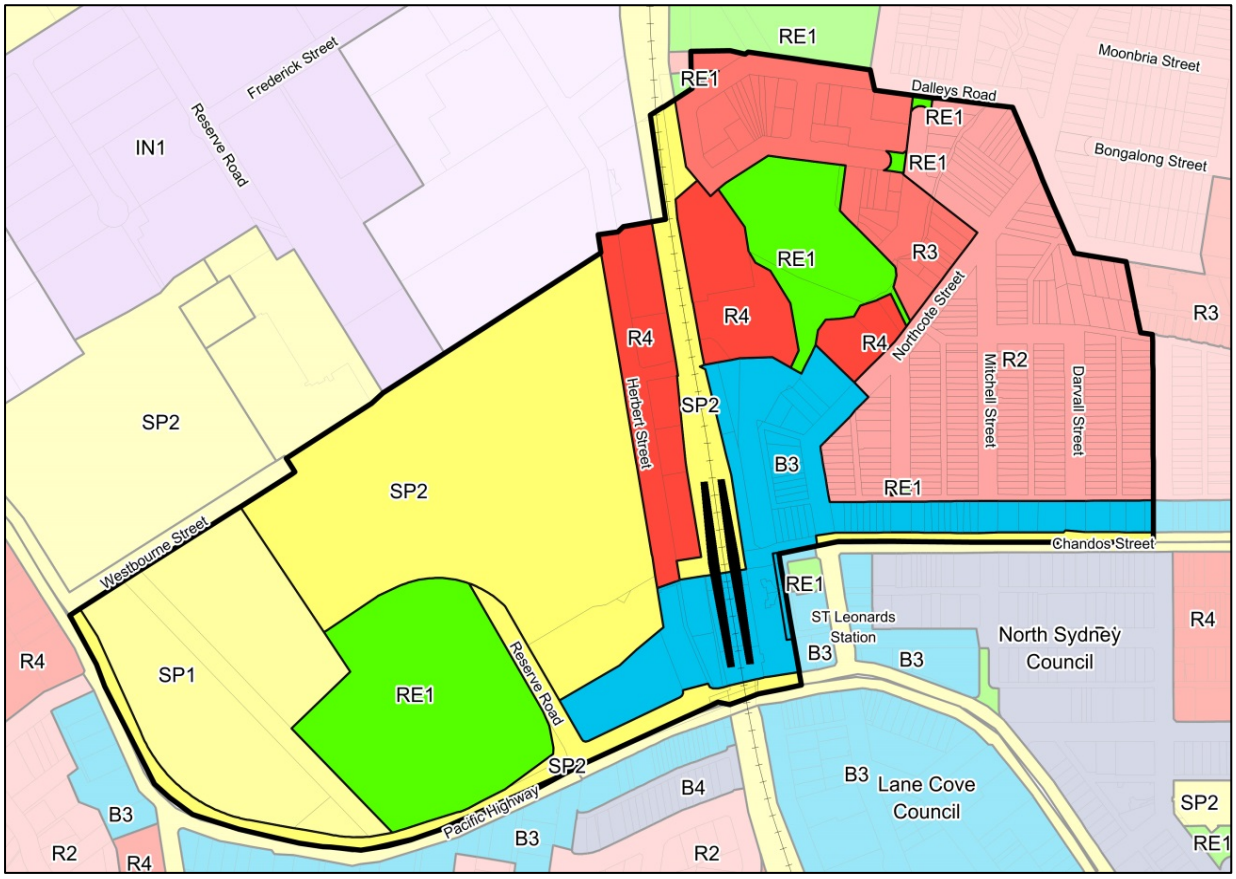
Attachment 1: Chatswood CBD

Map 1 Chatswood CBD



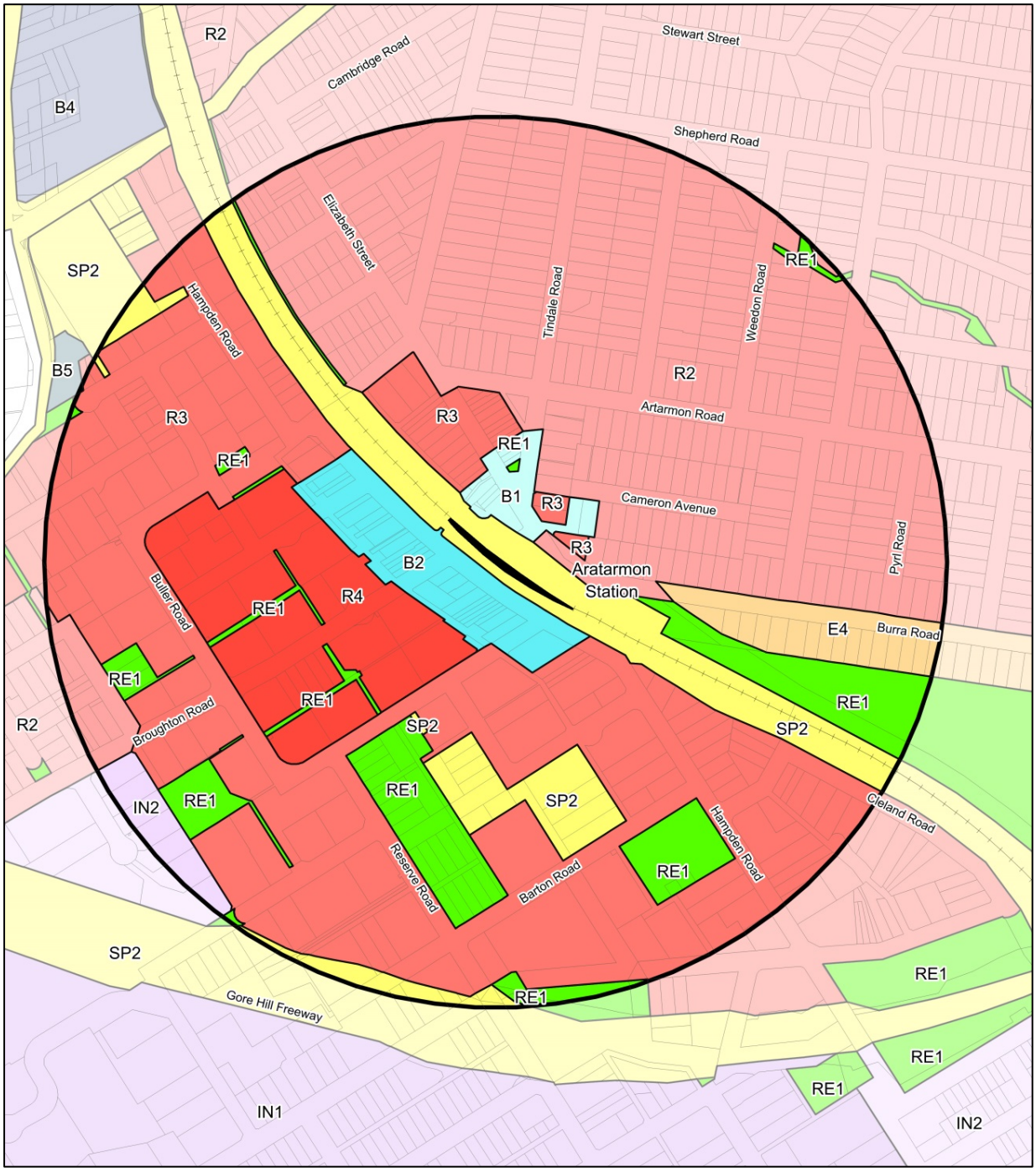
Attachment 2: St Leonards precinct

Map 2 St Leonards precinct



Attachment 3: Artarmon railway precinct

Map 3 Artarmon railway precinct



Attachment 4: Building Code of Australia building classifications

This table identifies the class of building and the different types of development:

Table 6 Building Code of Australia building classifications

Class of building	Types of development
Class 1a	Single dwellings. This includes a detached house or semi-detached dwellings, semi-detached dual occupancies, terraces, townhouses and villa units with fire resisting walls and no basement carpark.
Class 1b	Boarding house, guest house, hostel, or the like, not exceeding 300m^2 and not more than 12 residents.
Class 2	Building containing two or more sole occupancy units. This includes dual occupancies/duplexes (where one unit is above the other), serviced apartments with a kitchen, apartments in shop-top housing, and residential flat buildings.
Class 3	A residential building, other than a Class 1 or 2 building, including; boarding house, hostel, backpackers accommodation, and retirement villages.
Class 4	A single dwelling within a class 5, 6, 7, 8 or 9 building.
Class 5	An office building used for professional or commercial purposes, excluding Class 6, 7, 8 or 9 buildings.
Class 6	Shops and buildings used for supply of services directly to the public, including; café, restaurant, hairdresser's shop, public laundry, showroom, and service station.
Class 7a	A carpark.
Class 7b	Warehouses, storage/display of goods for sale by wholesale.
Class 8	A laboratory or building (factory) for the production, assembly, altering, repairing, packing, finishing or cleaning of goods for trade, sale or gain.
Class 9a	Healthcare building.
Class 9b	Assembly building including halls, libraries, schools, early childhood centres, church, theatre, nightclub/disco, cinema, and the like.
Class 9c	Aged care building.
Class 10a	Non habitable building such as private garage, carport, shed or the like.
Class 10b	Non habitable structures such as fences, retaining walls, swimming pools, or the like.

More information is at abcb.gov.au/Resources/Publications/Education-Training/Building-classifications.

Attachment 5: Laneway widenings

Table 7 Properties affected by laneway widening

Lane or road name	Properties affected	Suburb	Laneway widening required
George Brain Lane	327–341 Penshurst Street	Chatswood	1.2m from west side of west leg
George Brain Lane	72 Victoria Avenue	Chatswood	1.2m from west side of east leg
George Brain Lane	72–80 and 92–96 Victoria Avenue	Chatswood	2m from north side of southern leg
Stirling Lane	202–212, 218–224 Sydney Street; 334–348 and 352 Penshurst Street	Chatswood	2m from east side
Thomas Lane	73 Albert Avenue; 2 Thomas Street	Chatswood	3m widening on western side
View Lane, between Leplastrier Lane and Fullers Road	734, 754, 760, and 772–778 Pacific Highway; 1–7 and 25 View Street	Chatswood	2m from both sides
View Lane, north of Leplastrier Lane	786, 794, 812A–832 Pacific Highway; 49 View Street; 8–10 View Lane	Chatswood	2m from east side
Whitton Road between Moriarty and Fehon Roads	2 Fehon Road (Lot 3 DP 171741)	Chatswood	3m from east side
Burke Lane, between Waters Road and Station Street	25 Station Street; 36A–40 Park Road; 54–56 Waters Road	Naremburn	1.2m from north side
Kershaw Lane, parallel to Willoughby Road and Wheatleigh Street	141 Willoughby Road	Naremburn	1.2m from west side
Lawson Lane west of Oxley Street	2, 4 and 6 Lawson Lane	Naremburn	1.2m from north side
Appleton Lane, between Euroka and Bellambi Streets	157–173 and 179–181 Sailors Bay Road; 10 Kiola Road and Lot 1 DP 1048708	Northbridge	6 metre continuation of existing laneway between Euroka and Bellambi Streets
Jeffery Lane, east of Woonoona Road	288–294 Sailors Bay Road	Northbridge	1.2m from north side
Wagschall Lane	262–278 Sailors Bay Road	Northbridge	1.2m from north side
Dougherty Lane	40–44 Forsyth Street	North Willoughby	1.2m from north side
Iceworks Lane, between Alexander Ave and McClelland Street	181–195 High Street	North Willoughby	1.2m from west side

Lane or road name	Properties affected	Suburb	Laneway widening required
Adamson Lane, between Hudson Ave and Harris Street	569–593 Willoughby Road	Willoughby	1.2m from west side
Harris Lane, between Harris Street and Frenchs Road	12 Harris Street; 525–535, 545–547 and 553 Willoughby Road	Willoughby	2m from west side
Nathan Lane	449, 453– 465 and 485 Willoughby Road	Willoughby	1m from west side
Osborn Lane, off Harris Lane	6–8A Harris Street	Willoughby	1.2m from north side
Tulloh Lane, west of Tulloh Street	46–52 Frenchs Road; 68 Tulloh Street	Willoughby	2m from north side
Tulloh Lane, east of Tulloh Street	30–42 Frenchs Road	Willoughby	1.2m from north side